



## ***ISSPRO R600 PYROMETER TESTER***

### **TESTING THE SELF-POWERED (D'ARSONVAL) PYROMETER GAUGE:**

1. Disconnect the thermocouple lead wires from the pyrometer gauge.
2. Clip the tester lead wires to the pyrometer gauge terminals noting wire polarity. Yellow to (+), Red to (-).
3. Set up the tester by rotating the knob fully counter clockwise.
4. Turn tester ON and rotate tester knob clockwise. Pyrometer gauge reading should generally agree (within green bands) with R600 tester meter, providing that both meters were initially set to the same ambient reading. The pyrometer gauge pointer should have a smooth operation throughout its range.
5. If readings do not generally agree with R600 display or operation is not smooth, the pyrometer head is faulty.

### **TESTING THE LEADWIRE AND THERMOCOUPLE:**

**SET UP THE TESTER BY TURNING THE UNIT ON AND ROTATING THE KNOB UNTIL THE TESTER METER READS 1200 °F.**

**Note: If meter will not reach 1200 °F, replace the tester battery (1 "D" size).**

**Turn tester OFF between tests to conserve battery power.**

1. Clip the yellow tester lead wire to the yellow lead wire and red tester lead wire to the red lead wire.
2. Turn the tester ON. The tester meter should drop below 300°F indicating lead wire and thermocouple show continuity and should be operating properly.
3. If tester meter reads above 300 °F, clip the test lead wires directly to the thermocouple. Turn the tester ON. If tester meter now drops below 300°F, lead wires are faulty. If the meter reads above 300°F, the thermocouple is faulty.
4. Turn tester OFF, reconnect thermocouple lead wires to pyrometer gauge with red lead wire going to the unmarked terminal (-), and yellow lead wire to positive terminal (+).

Note: If problem is intermittent operation, clean terminations and check all connections during testing.

## TESTING AIR CORE PYROMETER GAUGE AND AMPLIFIER BOX

1. Disconnect the thermocouple lead wires from the amplifier box.
2. Clip the tester lead wires to the amplifier box noting wire polarity. Yellow to (+), Red to (-).
3. Supply 12 volts to power wires on amplifier box noting wire polarity. Red to (+), Black to (-).
4. Set up the tester by rotating the knob fully counter clockwise.
5. Turn tester ON and rotate tester knob clockwise to settings (see chart). The pyrometer should have a smooth operation throughout its range.
6. If readings do not generally agree with chart below or operation is not smooth, the pyrometer gauge and amplifier box is faulty.

R600 Tester Settings	Air Core Pyrometer Reading
350°F	300°F
675°F	600°F
975°F	900°F
1300°F	1200°F
1650°F	1500°F

## TESTING THE LEADWIRE AND THERMOCOUPLE:

**SET UP THE TESTER BY TURNING THE UNIT ON AND ROTATING THE KNOB UNTIL THE TESTER METER READS 1200 °F.**

**Note: If meter will not reach 1200 °F, replace the tester battery (1 “D” size).**

**Turn tester OFF between tests to conserve battery power.**

5. Clip the yellow tester lead wire to the yellow lead wire and red tester lead wire to the red lead wire.
6. Turn the tester ON. The tester meter should drop below 300°F indicating lead wire and thermocouple show continuity and should be operating properly.
7. If tester meter reads above 300 °F, clip the test lead wires directly to the thermocouple. Turn the tester ON. If tester meter now drops below 300°F, lead wires are faulty. If the meter reads above 300°F, the thermocouple is faulty.
8. Turn tester OFF, reconnect thermocouple lead wires to pyrometer gauge with red lead wire going to the unmarked terminal (-), and yellow lead wire to positive terminal (+).

Note: If problem is intermittent operation, clean termination and check all connections during testing.